

**What is claimed is:**

1. A cylinder head arrangement for a piston compressor, particularly for a hermetically enclosed refrigerant compressor, with a valve plate, a suction gas channel, a discharge chamber and a retainer element for a discharge valve, wherein the suction gas channel and the discharge chamber are arranged on different sides of the retainer element.
2. An arrangement according to claim 1, wherein the suction gas channel and one flow direction of the discharge gas to the discharge chamber are arranged to be radial to one another.
3. An arrangement according to claim 2, wherein the suction gas channel extends radially and has, in the area of the deflection from the radial to the axial direction, a curved baffle.
4. An arrangement according to claim 3, wherein the baffle has a large curvature radius.
5. An arrangement according to claim 1, wherein the suction gas channel ends in a suction opening, whose edges are rounded.
6. An arrangement according to claim 1, wherein the suction gas channel extends between the retainer element and the valve plate.

7. An arrangement according to claim 6, wherein the suction gas channel is formed by a recess in the retainer element and/or in the valve plate.
8. An arrangement according to claim 1, wherein the suction gas channel is divided into several sections, each section ending in a compression chamber via its own suction opening.
9. An arrangement according to claim 8, wherein the suction openings are arranged around a discharge gas opening arranged in the valve plate.
10. An arrangement according to claim 1, wherein the retainer element and/or the valve plate are made of a material, which has lower heat conductivity than unalloyed steel.
11. An arrangement according to claim 1, wherein the valve plate and/or the retainer element are made of a ceramic material, high-grade steel or fibre-reinforced plastic.
12. An arrangement according to claim 1, wherein the valve plate and/or the retainer element have a surface quality and rigidity, which make a sealing between the valve plate and the retainer element dispensable.
13. An arrangement according to claim 1, wherein the valve plate and the retainer element are made as circular discs.

14. An arrangement according to claim 1, wherein the suction valve and/or the discharge valve are made as leaf valves with a valve leaf, which is part of a suction or discharge valve plate.